

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): A signal transformer having a primary limb and a first secondary limb, a primary winding at least partly enclosing the primary limb and a secondary winding at least partly enclosing the first secondary limb and the primary limb being connected to the first secondary limb, wherein $2n + 1$ additional secondary limbs are provided, where $n = 0, 1, 2, 3, \dots$, and the additional secondary limbs are connected to the primary limb and the first secondary limb, ~~in that~~wherein at least one secondary winding is in each case provided for the additional secondary limbs and for the first secondary limb, the secondary winding at least partly enclosing the respective secondary limb, and ~~in that~~wherein a respective control winding at least partly encloses a respective secondary limb.
2. (Previously Presented): The signal transformer as claimed in claim 1, wherein there is the same number of secondary limbs on both sides of the primary limb.
3. (Previously Presented): The signal transformer as claimed in claim 2, wherein the distance between respectively adjacent secondary limbs and the distance between the primary limb and a respective secondary limb adjacent to the primary limb are the same.
4. (Previously Presented): The signal transformer as claimed in claim 1, wherein the primary winding is designed as a conductor track of a primary winding printed circuit board.

5. (Previously Presented): The signal transformer as claimed in claim 4, wherein the conductor track of the primary winding printed circuit board is surrounded by an insulating layer.

6. (Previously Presented): The signal transformer as claimed in claim 4, wherein the primary winding printed circuit board has an opening for leading through the primary limb.

7. (Previously Presented): The signal transformer as claimed in claim 6, wherein the conductor track of the primary winding printed circuit board extends around the opening in the board propagation direction of the primary winding printed circuit board.

8. (Previously Presented): The signal transformer as claimed in claim 1, wherein the or each secondary winding of a secondary limb is in each case designed as a conductor track of a respective secondary winding printed circuit board, and wherein the control winding of a secondary limb is designed as a conductor track of a control winding printed circuit board.

9. (Previously Presented): The signal transformer as claimed in claim 8, wherein the conductor track of the secondary winding printed circuit board and the conductor track of the control winding printed circuit board are surrounded by an insulating layer.

10. (Previously Presented): The signal transformer as claimed in claim 8, wherein the secondary winding printed circuit board and the control winding printed circuit board have an opening for leading through the respective secondary limb.

11. (Previously Presented): The signal transformer as claimed in claim 10, wherein the conductor track of the secondary winding printed circuit board extends around the opening in the board propagation direction of the secondary winding printed circuit board, and

wherein the conductor track of the control winding printed circuit board extends around the opening in the board propagation direction of the control winding printed circuit board.

12. (Previously Presented): The signal transformer as claimed in claim 1, wherein the or each secondary winding of a secondary limb and the control winding of the same secondary limb are in each case designed as conductor tracks of a multilayer printed circuit board.

13. (Previously Presented): The signal transformer as claimed in claim 12, wherein the multilayer printed circuit board has an opening for leading through the secondary limb.

14. (Previously Presented): The signal transformer as claimed in claim 13, wherein the conductor tracks of the multilayer printed circuit board extend around the opening in the board propagation direction of the multilayer printed circuit board.

15. (Previously Presented): The signal transformer as claimed in claim 1, wherein the secondary windings of the secondary limbs and the control windings of the secondary limbs are in each case designed as conductor tracks of a multilayer printed circuit board.

16. (Previously Presented): The signal transformer as claimed in claim 1, wherein the secondary windings of the secondary limbs and the control windings of the secondary limbs and the primary winding of the primary winding limb are in each case designed as conductor tracks of a multilayer printed circuit board.

17. (Previously Presented): The signal transformer as claimed in claim 15 wherein the multilayer printed circuit board has openings for leading through the respective secondary limbs and an opening for leading through the primary limb.

18. (Previously Presented): The signal transformer as claimed in claim 17, wherein each conductor track of the multilayer printed circuit board extends around the associated opening in the board propagation direction of the multilayer printed circuit board.

19. (Previously Presented): The signal transformer as claimed in claim 12, wherein the conductor tracks are insulated from one another by insulating layers of the multilayer printed circuit board.

20. (Previously Presented): A method for operating a signal transformer as claimed in claim 1, in which a main flux is generated in the primary limb by feeding a primary winding signal into the primary winding, wherein a control signal is fed into at least one control winding in such a way that a control flux is generated in the associated secondary limb, and ~~in that~~ wherein a secondary winding signal present at the associated secondary winding is influenced by means of the control flux.

21. (Previously Presented): The method as claimed in claim 20, wherein the secondary winding signal is switched on or off by the control flux.

22. (Currently Amended): A signal transformer as claimed in claim 1, wherein the signal transformer is comprised in a driver circuit for at least one drivable power semiconductor switch, ~~wherein the driver circuit has a signal transformer as claimed in claim 1.~~

23. (Currently Amended): The signal transformer~~driver circuit~~ as claimed in claim 22, wherein the signal transformer is connected in between a signal function generator and at least one drivable power semiconductor switch.